

1 (C) AMENDMENTS TO THE CLAIMS

2 1. (CURRENTLY AMENDED) A printing system comprising:
3 rewritable media having a bistable, electrochromic, molecular colorant layer susceptible
4 to localized electrical fields; and
5 associated with said media, an electrode subsystem producing said localized electrical
6 fields.

7 2. (ORIGINAL) The system as set forth in claim 1 further comprising:
8 a transport for moving a sheet of said media passed said electrode subsystem.

9 3. (ORIGINAL) The system as set forth in claim 2, the transport further comprising:
10 at least one media position sensor.

11 4. (ORIGINAL) The system as set forth in claim 1 further comprising:
12 means for downloading, storing, sequencing, and printing text and images.

13 5. (ORIGINAL) The system as set forth in claim 1 configured as a portable hard copy
14 printing apparatus.

15 6. (ORIGINAL) The system as set forth in claim 1 in a portable computer appliance.

16 7. (ORIGINAL) The system as set forth in claim 1 in a telecommunications device.

1 8. (ORIGINAL) The system as set forth in claim 1 wherein said electrode subsystem
2 substantially stationary and configured to print on a sheet of said media as said media is
3 translated passed said electrode subsystem.

4 9. (CURRENTLY AMENDED) The system as set forth in claim 1 wherein said [[
5 ~~electrochromic~~]]colorant layer further comprises:

6 at least one layer of a molecular colorant coating wherein molecules of the coating are at
7 least bichromal and subjectable to bistable switching between color states under influence of
8 said localized electric field.

C 3
9 10. (ORIGINAL) The system as set forth in claim 9 comprising:

10 said molecules exhibit an electric field induced band gap change, occurring via a
11 mechanism selected from a group including (1) molecular conformation change or an
12 isomerization, (2) change of extended conjugation via chemical bonding change, and (3)
13 molecular folding or stretching.

14 11. (ORIGINAL) The system as set forth in claim 2, said transport further comprising:

15 electrical generators connected to said electrode subsystem for producing said localized
16 electrical fields.

17 12. (ORIGINAL) The system as set forth in claim 9, the molecular colorant coating further
18 comprising:

19 a mosaic pixel pattern of primary color pixels such that full color printing is produced by
20 said electrode subsystem on said media.

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1 13 14. (ORIGINAL) The system as set forth in claim 1, said electrode subsystem further

2 comprising:

3 means to field address temporally and spatially.

4 14 15. (CURRENTLY AMENDED) A hard copy printing method comprising:

5 selectively providing localized electric fields, each of said fields conforming to a
6 predetermined picture element size;

7 transporting a printing medium across said fields such that a bistable electrochromic
8 molecular colorant layer of said medium is subjected to said electric fields; and

9 manipulating said electric fields to produce printed data onto said electrochromic
10 colorant layer.

C 3 11 15 16. (ORIGINAL) The method as set forth in claim 14 wherein a first polarity of said localized
12 electric fields prints a picture element.

13 16 17. (ORIGINAL) The method as set forth in claim 15 wherein a reverse polarity of said first
14 polarity of said localized electric fields erases a picture element.

15 17 18. (ORIGINAL) The method as set forth in claim 14 used in a portable hard copy apparatus.

16 18 19. (ORIGINAL) The method as set forth in claim 15 used in a portable computer appliance.

17 19 20. (ORIGINAL) The method as set forth in claim 14 used in a telecommunications device.

1 ²⁰ 21. (CURRENTLY AMENDED) The method as set forth in claim ¹⁴ 15 wherein said
2 [[electrochromic]] colorant layer is at least one layer of a molecular colorant coating wherein
3 molecules of the coating are at least bichromal and subjectable to bistable switching between
4 color states under influence of said localized electric field.

5 ²¹ 22. (ORIGINAL) The method as set forth in claim ²⁰ 21 wherein said molecules exhibit an
6 electric field induced band gap change, occurring via a mechanism selected from a group
7 including (1) molecular conformation change or an isomerization, (2) change of extended
8 conjugation via chemical bonding change, and (3) molecular folding or stretching.

C3 ²² 9 23. (CURRENTLY AMENDED) A method of doing business, the method comprising:
10 providing a printing apparatus including an electrode subsystem for providing selectively
11 localized electric fields corresponding to molecular colorant picture elements printable from
12 digital data;
13 providing a rewritable media instrument susceptible to said fields wherein said media
14 instrument is associated with a service and use fees associated therewith; and
15 printing and reprinting legible information on said media instrument associated with said
16 use fee and a current balance with said stationary printing apparatus whenever said media
17 instrument is used in association with said printing apparatus.

²³ 18 24. (ORIGINAL) The method as set forth in claim ²² 23 wherein a first polarity of said localized
19 electric fields prints a picture element.

1 ²⁴ 25. (ORIGINAL) The method as set forth in claim ²³ 24 wherein a reverse polarity of said first
2 polarity of said localized electric fields erases a picture element.

3 ²⁵ 26. (ORIGINAL) The method as set forth in claim ²² 23 wherein said business is conducted
4 using a portable hard copy apparatus.

5 ²⁶ 27. (ORIGINAL) The method as set forth in claim ²² 23 wherein said business is conducted
6 using a portable computer appliance.

7 ²⁷ 28. (ORIGINAL) The method as set forth in claim ²² 23 wherein said business is conducted
8 using in a telecommunications device.

9 ²⁸ 29. (CURRENTLY AMENDED) The method as set forth in claim ²² 23 wherein said picture
10 elements further comprise an electrochromic colorant layer [[is]] of at least one layer of a
11 molecular colorant coating wherein molecules of the coating are at least bichromal and
12 subjectable to bistable switching between color states under influence of said localized electric
13 field.

14 ²⁹ 30. (ORIGINAL) The method as set forth in claim ²⁸ 29 wherein said molecules exhibit an
15 electric field induced band gap change, occurring via a mechanism selected from a group
16 including (1) molecular conformation change or an isomerization, (2) change of extended
17 conjugation via chemical bonding change, and (3) molecular folding or stretching.

30
1 ~~31.~~ (PREVIOUSLY PRESENTED) A method of doing business of printing hard copy, the
2 method comprising:
3 receiving digital data representative of a document; and
4 producing an image of said document on a rewritable media having at least one layer of
5 a molecular colorant wherein molecules thereof are at least bichromal and subjectable to
6 bistable switching between color states under influence of localized electric fields.

31
7 ~~32.~~ (PREVIOUSLY PRESENTED) The method as set forth in claim 31 wherein said
8 molecules exhibit an electric field induced band gap change, occurring via a mechanism
9 selected from a group including (1) molecular conformation change or an isomerization, (2)
10 change of extended conjugation via chemical bonding change, and (3) molecular folding or
11 stretching.

C3 32
12 ~~33.~~ (PREVIOUSLY PRESENTED) A method of manufacturing a hard copy system having a
13 print zone, the method comprising:
14 mounting adjacently to said print zone a subsystem having a plurality of electrodes; and
15 adjusting said electrodes for providing selectively localized electric fields corresponding
16 to picture elements printable from digital data such that adjacently positioned rewritable media
17 having a molecular colorant has molecules of said colorant selectively switched between at
18 least two color states by said fields.

33
19 ~~34.~~ (PREVIOUSLY PRESENTED) The method as set forth in claim 33 further wherein said
20 plurality of electrodes is a linear array for sequentially printing lines of picture elements across
21 said media.

1 ³⁴ 35. (PREVIOUSLY PRESENTED) The method as set forth in claim ³² 33 wherein said
C 3 2 plurality of electrodes is a matrix array for simultaneously printing a matrix of picture elements
C 3 3 on said media.
